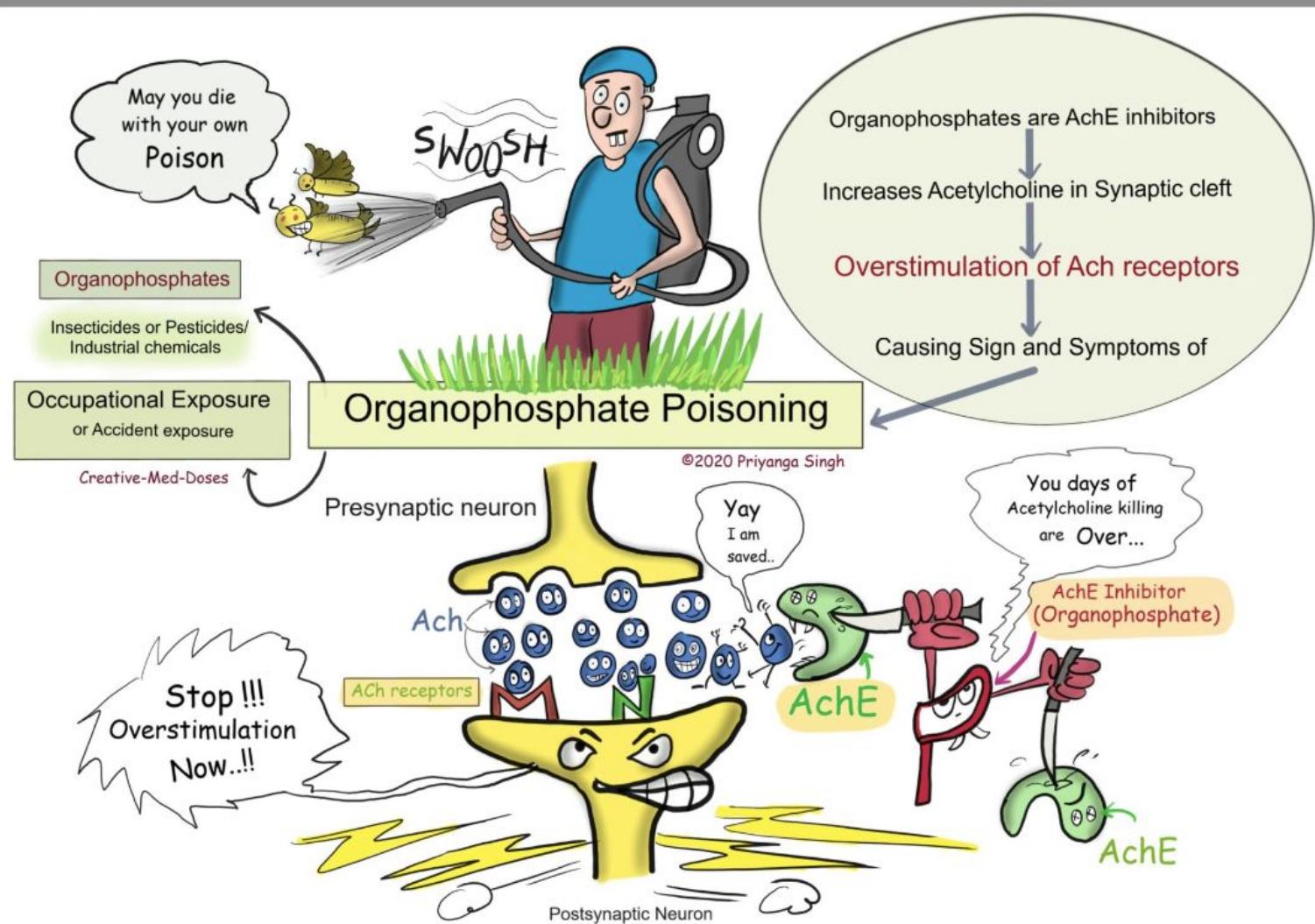


Organophosphate Poisoning

Outline

- Assessment
- Emergency Management
- Complications



Organophosphate Poisoning

Muscarinic Overstimulation

Musc leaks from Everywhere



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Salivation
Lacrimation
Urination
Defecation
GI cramps
Emesis

I am Overstimulated

Now you all work Your Ass off &%@#...



Nicotinic Overstimulation

Nics give Tension, weakness and Paralysis

HyperTension and Muscle weakness

Mydriasia Tachycardia (MT)

Muscle Weakness ,Twitching, Fasciculation (WTF)
High BP, Paralysis



Creative-Med-Doses

Emergency Management

Provider protection

Gloves, gown, mask, eye protection

DECONTAMINATE THE PATIENT!

Remove all clothes

Wash with soap and water

ABC

O₂

IVF

Cardiac monitor

Beware the “Killer B’s”: Bradycardia Bronchorrhea and Bronchospasm

Emergency Management

Goal of acute management:

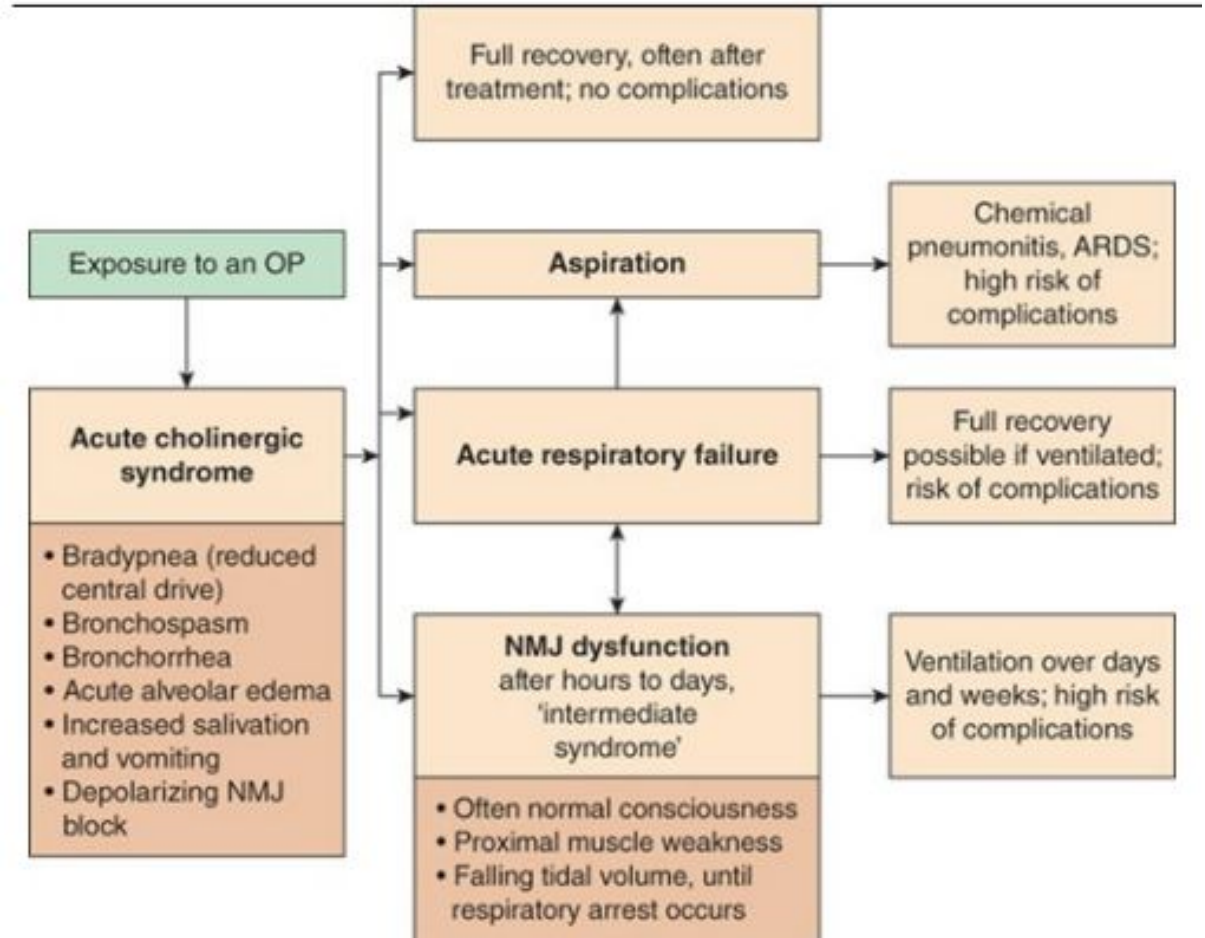
Treat muscarinic effects

- Atropine

Reactivate acetylcholinesterase

- Pralidoxime

Complications



Approach to Poisoned Patient

- Resuscitation
 - ABCDE's
- Assessment
 - Consider Toxidromes
 - Vitals, Labs investigations, ECG
- Decontamination
 - Protect yourself and others (PPE)
 - Gastric lavage, Activated charcoal
- Antidote
 - If appropriate
- Disposition
 - In non-critical patients, consider monitoring up to 24 hours

Selected Antidotes and Their Indications

ANTIDOTE	INDICATION (POISON)
<i>N</i> -acetylcysteine	Acetaminophen
Fomepizole (4-MP)/ethanol	Methanol/ethylene glycol
Oxygen/hyperbarics	Carbon monoxide
Naloxone	Opioids
Physostigmine	Anticholinergics
Atropine/pralidoxime (2-PAM)	Organophosphates
Methylene blue	Methemoglobinemia
Nitrites/hydroxycobalamin	Cyanide
Deferoxamine	Iron
Dimercaprol (BAL)	Arsenic, lead
Succimer (DMSA)	Lead, mercury
CaEDTA	Lead
Fab fragments	Digoxin, crotalids
Glucagon	β -blockers
Sodium bicarbonate	Salicylates, tricyclic antidepressants
Calcium, insulin/glucose	Calcium channel antagonists
Dextrose, glucagon, octreotide pyridoxine (vitamin B ₆)	Oral hypoglycemic agents Isoniazid (INH)
Intravenous fat emulsion	Local anesthetic systemic toxicity Certain fat-soluble medications